

IN THE CLAIMS:

Please cancel Claims 1-10 and 27-39, enter the amended Claim 11 and add new Claims 40-46 as follows. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1-10 (canceled)

Claim 11 (withdrawn): A method for selecting modulators of the protein complex of Claim 40 ~~an interaction between a first protein and a second protein in a protein complex formed by said first and second proteins;~~

~~(a) said first protein being selected from the group consisting of~~

~~_____ (i) survivin;~~

~~_____ (ii) a survivin homologue having an amino acid sequence at least 90% identical to that of survivin and capable of interacting with a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT;~~

~~_____ (iii) a survivin fragment capable of interacting with a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT, and~~

~~_____ (iv) a fusion protein containing survivin, said survivin homologue or said survivin fragment; and~~

~~(b) said second protein being selected from the group consisting of~~

~~_____ (1) HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT;~~

~~_____ (2) a homologue of a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT having an amino acid sequence at least 90% identical to that of said protein and capable of interacting with survivin;~~

~~_____ (3) a fragment of a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT and capable of interacting with survivin, and~~

~~_____ (4) a fusion protein containing a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT, said protein homologue or said protein fragment, said method comprising:~~

~~contacting said first protein with said second protein in the presence of a test compound; and~~

~~detecting the interaction between said first protein and said second protein.~~

Claim 12 (withdrawn): The method of Claim 11, wherein at least one of said first and second proteins is a fusion protein having a detectable tag.

Claim 13 (withdrawn): The method of Claim 11, wherein said contacting step is conducted in a substantially cell free environment.

Claim 14 (withdrawn): The method of Claim 11, wherein said first protein and said second protein are contacted with each other in a host cell.

Claim 15 (withdrawn): The method of Claim 14, wherein said host cell is a yeast cell.

Claim 16 (withdrawn): The method of Claim 11, wherein said determining step comprises measuring the amount of the protein complex formed by said first and second proteins.

Claim 17 (withdrawn): The method of Claim 11, further comprising a step of generating a data set defining one or more selected test compounds, said data set being embodied in a transmittable form.

Claim 18 (withdrawn): A method for selecting modulators of the protein complex of Claim 5, comprising:

- contacting said protein complex with a test compound; and
- detecting the interaction between said first protein and said second protein.

Claim 19 (withdrawn): The method of Claim 18, further comprising a step of generating a data set defining one or more selected test compounds, said data set being embodied in a transmittable form.

Claim 20 (withdrawn): A method for selecting modulators of an interaction between a first polypeptide and a second polypeptide in a protein complex, said first polypeptide being survivin or a homologue or fragment thereof and said second polypeptide being a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT or a homologue or fragment thereof, said method comprising:

- providing in a host cell a first fusion protein having said first polypeptide, and a second fusion protein having said second polypeptide, wherein a DNA binding domain is fused to one of said first and second polypeptides while a transcription-activating domain is fused to the other of said first and second polypeptides;

- providing in said host cell a reporter gene, wherein the transcription of the reporter gene is controlled by the interaction between the first polypeptide and the second polypeptide;

- allowing said first and second fusion proteins to interact with each other within said host cell in the presence of a test compound; and

- determining the expression of said reporter gene.

Claim 21 (withdrawn): The method of Claim 20, wherein said host cell is a yeast cell.

Claim 22 (withdrawn): A method for selecting compounds capable of interfering with the interaction between a first protein and a second protein in a protein complex, wherein

- (a) said first protein is selected from the group consisting of
- (i) survivin,
 - (ii) a survivin homologue having an amino acid sequence at least 90% identical to that of survivin and capable of interacting with a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT,
 - (iii) a survivin fragment capable of interacting with a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT, and
 - (iv) a fusion protein containing survivin, said survivin homologue or said survivin fragment; and
- (b) said second protein is selected from the group consisting of
- (1) HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT,
 - (2) a homologue of a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT having an amino acid sequence at least 90% identical to that of said protein and capable of interacting with survivin,
 - (3) a fragment of a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT capable of interacting with survivin, and
 - (4) a fusion protein containing a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT, said protein homologue or said protein fragment, said method comprising:
 - contacting said first protein with said second protein in the presence of a test compound and detecting the interaction between said first protein and said second protein; and
 - contacting said first protein with said second protein in the absence of said test compound and detecting the interaction between said first protein and said second protein.

Claim 23 (withdrawn): The method of Claim 22, wherein said contacting steps are conducted in a substantially cell free environment.

Claim 24 (withdrawn): The method of Claim 22, wherein said contacting steps are conducted in a host cell.

Claim 25 (withdrawn): The method of Claim 22, wherein the first protein is a fusion protein containing survivin or said survivin fragment, and said second protein is a fusion protein containing a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT or said protein fragment.

Claim 26 (withdrawn): The method of Claim 22, further comprising a step of generating a data set defining one or more selected test compounds, said data set being embodied in a transmittable form.

Claims 27-39 (canceled)

Claim 40 (new): An isolated protein complex comprising a first protein interacting with a second protein, wherein said first protein is selected from the group consisting of:

- (a) survivin, or a fragment thereof that interacts with HDLC1;
- (b) a first polypeptide having an amino acid sequence at least 90% identical to that of (a), and that interacts with HDLC1; and
- (c) a first fusion protein comprising (a) or (b); and

wherein said second protein is selected from the group consisting of:

- (i) HDLC1, or a fragment thereof that interacts with survivin;
- (ii) a second polypeptide having an amino acid sequence at least 90% identical to that of (i), and that interacts with survivin; and
- (iii) a second fusion protein comprising (i) or (ii).

Claim 41 (new): The isolated protein complex of Claim 40, wherein said first protein is survivin and said second protein is HDLC1.

Claim 42 (new): The isolated protein complex of Claim 40, wherein said first protein is said first fusion protein, and said second protein is said second fusion protein.

Claim 43 (new): The isolated protein complex of Claim 40, wherein said fragment of survivin comprises amino acid residues 89 to 142, 3 to 99, 47 to 142, or 47 to 99 of survivin.

Claim 44 (new): The isolated protein complex of claim 40, wherein said first protein is covalently linked to said second protein.

Claim 45 (new): An isolated protein complex comprising a first protein interacting with a second protein, wherein
said first protein is a first fusion protein comprising a first detectable tag and

- (a) survivin;
- (b) a survivin fragment containing a contiguous span of 10 amino acid residues of survivin, and that interacts with HDLC1; or
- (c) a first polypeptide having an amino acid sequence at least 90% identical to that of (a), and that interacts with HDLC1; and

wherein
said second protein is a second fusion protein comprising a second detectable tag and

- (i) HDLC1;
- (ii) an HDLC1 fragment comprising a contiguous span of 10 amino acid residues of HDLC1, and that interacts with survivin; or
- (iii) a second polypeptide having an amino acid sequence at least 90% identical to that of (i), and that interacts with survivin.

Claim 46 (new): The protein complex of Claim 45, wherein said first protein is said first fusion protein comprising said first detectable tag and survivin; and said second protein is said second fusion protein comprising said second detectable tag and HDLC1.